TIGGER Transit Investments for Greenhouse Gas and Energy Reduction

U.S. Department of Transportation
Federal Transit Administration


Courtesy of Marshall LaPlante

Project name:
Santa Clarita Transit Solar Canopy

Transit agency:
Santa Clarita Transit

Location: Santa Clarita, California

TIGGER goal: Energy reduction

FTA region number: IX

Award amount: $4,620,000

Congressional district: CA-25

Funding mechanism:
Recovery Act (ARRA)

TIGGER Helps Santa Clarita Transit Ride on Sunshine

Santa Clarita Transit (SCT) is tapping Southern California's abundant sunshine as part of an effort to reduce the transit agency's greenhouse gas emissions.

Facility Project

Solar Project

With the help of a $4.6 million award from the U.S. Department of Transportation's TIGGER Program, the transit agency installed a 65,000-square-foot photovoltaic (PV) system atop its Transit Maintenance Facility (TMF). More than 3,200 PV panels now cover the facility's bus wash and four bus ports. The new solar canopy is expected to generate enough electrical power to offset up to 97% of the facility's electricity use — equivalent to half of Santa Clarita Transit's total energy consumption.

The project was completed in July 2011. The solar panels were manufactured by Lamb Energy & Professional Solar Products; Stronghold Engineering served as a consultant on the project.

SCT serves Santa Clarita, California, and surrounding communities. The agency's fleet includes more than 100 transit buses, ranging in length from 23 to 60 feet. The buses are powered by a variety of fuels, including compressed natural gas, diesel, and gasoline. SCT began using compressed natural gas in 2005 as part of a commitment to air quality improvements and greenhouse gas emissions reduction. Each year, SCT uses about 730,000 gallons of diesel fuel.

SCT's ridership totaled 4 million in fiscal year 2009–2010. The agency has eight local fixed routes, eight express routes, and two station link routes.

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Aerial view of the solar canopies installed at the Santa Clarita Transit Maintenance Facility.

The Santa Clarita Transit solar canopy project supports the transit agency's strong commitment to sustainability by displacing grid electricity with power generated from clean, renewable solar energy. The project is reducing greenhouse gas emissions and broadening public awareness of clean energy options. The TMF, completed in 2006, is 40% more energy efficient than required by California's energy code. And it has received gold certification from the U.S. Green Building Council's LEED rating system.

Impact:

Santa Clarita Transit is reducing energy consumption by displacing up to half of its grid electricity use with power generated from clean, renewable solar energy.

About TIGGER

The Transit Investment for Greenhouse Gas and Energy Reduction (TIGGER) Program *was established in 2009 by the U.S. Department of Transportation's Federal Transit Administration (FTA). Designed to reduce energy use and greenhouse gas emissions in transit agencies around the country, the TIGGER Program made funds available for capital investments that would reduce greenhouse gas emissions or lower the energy use of public transportation systems. An initial $100 million in American Recovery and Reinvestment Act grants funded 43 competitively-selected transit projects. In 2010, the FTA provided an additional $75 million in grants to fund 27 new TIGGER projects. These 70 projects are employing a variety of technologies to meet the program goals, including solar installations, building efficiency improvements, wind technology, wayside energy storage for rail, and purchase of more efficient buses. In fiscal year 2011, FTA provided an additional $49.9 million to continue the program.*

TIGGER

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For More Information

Santa Clarita Transit:
www.santaclaritatransit.com

FTA TIGGER:
www.fta.dot.gov/TIGGER